



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/041,759 | 01/10/2002 | Uwe Glatzel | 225MU/50807 | 3217 |

7590 09/05/2003

Crowell & Moring, L.L.P.
P.O. Box 14300
Washington, DC 20044-4300

| |
|----------|
| EXAMINER |
|----------|

SHEEHAN, JOHN P

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

1742

DATE MAILED: 09/05/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/041,759

Applicant(s)

GLATZEL ET AL.

Examiner

John P. Sheehan

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, and 4-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 6 to 8, 11 and 15 to 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen-Dinh (Nguyen, US Patent No. 4,935,072).

Nguyen-Dinh teaches a nickel-base single crystal super alloy having a composition that overlaps the alloy composition recited in the instant claims (column 2, lines 5 to 8 and 15 to 33).

Art Unit: 1742

Nguyen-Dinh and claims differ in that Nguyen-Dinh does not teach the exact same proportions as recited in the instant claims.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the alloys taught by Nguyen-Dinh overlap applicants' claimed alloy and therefore are considered to establish a prima facie case of obviousness, In re Peterson 65 USPQ2d 1379 (CAFC 2003, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2 and 4 to 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bornstein et al. (Bornstein, PCT Document No. WO 93/24683, cited in the IDS submitted January 10, 2002 as reference AK).

Bornstein teaches a single crystal nickel based superalloy for use in gas turbine engines (page 1, lines 9 and page 2, lines 15 to 18). The alloy composition disclosed by Bornstein has a composition that overlaps applicants' claimed alloy composition (page 5, the table). Bornstein teaches that the turbine parts are made by simply casting the molten alloy as recited in instant claim 8 (page 4, lines 2 to 20 and Figure 1).

Art Unit: 1742

Applicants' claims and Bornstein differ in that Bornstein does not teach the specific proportions recited in the applicants' claims.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the alloys taught by Bornstein overlap applicants' claimed alloy and therefore are considered to establish a prima facie case of obviousness, In re Peterson 65 USPQ2d 1379 (CAFC 2003, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

Response to Arguments

3. Applicant's arguments filed June 19, 2003 have been fully considered but they are not persuasive.

Applicants argue that their claims require 3 to 3.7% tungsten and that Nguyen-Dinh does not teach an alloy having this composition. The Examiner is not persuaded. Nguyen-Dinh does in fact teach that the disclosed alloy contains 3 to 6% tungsten (column 2, line 20).

Applicants argue that Bornstein does not teach or suggest a tungsten to rhenium ratio of 1.1 to 1.6 as recited in applicants' claims. The Examiner is not persuaded. The tungsten and rhenium proportions taught by Bornstein include proportions of tungsten and rhenium that would result in tungsten to rhenium having ratios of 1.1 to 1.6 as recited in the instant claims.

Art Unit: 1742

Applicants, citing the table and example alloy on Bornstein's page 5, argue that Bornstein teaches away from the instant invention in that Bornstein's "Most Preferred" composition (Bornstein, page 5, the table) teaches 4.6 to 7.2% tungsten whereas applicants' claim 1 recites a tungsten range of 3 to 3.7%. The Examiner is not persuaded. First, it should be pointed out that applicants' claims 2, 4, 5 and 13 to 18 are silent with respect to the tungsten content. Thus, applicants' argument regarding tungsten content has no bearing with respect to claims 2, 4, 5 and 13 to 18. With respect to claims 1, 6 to 11, which do recite 3 to 3.7% tungsten it is the Examiner's position that the teachings of a reference are not limited to its preferred embodiments, but rather the teachings of a reference are considered to encompass everything that is taught in a complete reading of the reference including non-preferred embodiment MPEP 2123. Although Bornstein's "Most Preferred" embodiment contains 4.6 to 7.2% tungsten, Bornstein does teach the use of 3 to 10% tungsten and 3 to 7.2% tungsten as a "Preferred" embodiment, both ranges encompassing applicants' claims range of 3 to 3.7% tungsten.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

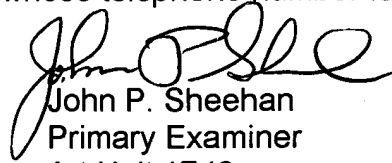
Art Unit: 1742

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (703) 308-3861. The examiner can normally be reached on T-F (6:30-5:00) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (703) 308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.



John P. Sheehan
Primary Examiner
Art Unit 1742

jps
September 3, 2003